Observations:

sns.histplot(df['Age'], bins=30, kde=True)

Observation:

- The **Age distribution** is right-skewed: more passengers are **younger**, especially under 40.
- There is a **peak around 20–30 years**, indicating a large portion of passengers were young adults.
- A small number of very **elderly passengers** (above 70) appear, but are rare.

sns.boxplot(y=df['Fare'])

Observation:

- Fare has a large number of outliers on the higher end.
- Most passengers paid less than 100, but some fares are extremely high (e.g., 500+), likely indicating first-class cabins.
- The median fare is relatively low, suggesting most passengers traveled in lower classes.

sns.boxplot(x='Survived', y='Age', data=df)

Observation:

- Median age is slightly lower for those who survived compared to those who did not.
- Younger passengers, including children, had higher survival rates.
- There are outliers in both groups, but more elderly passengers are in the non-survived group.

sns.scatterplot(x='Age', y='Fare', hue='Survived', data=df)

Observation:

- Survivors are generally more concentrated in the higher fare range.
- There are many non-survivors in the low fare region, suggesting that higher class (higher fare) passengers had better survival chances.
- Younger survivors also appear across all fare levels, suggesting age and class combined influenced survival.